## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Taylor R. Efland

Docket No.: TI-30963.1

Serial No.: TBD

Examiner:

Filed: Herewith

Art Unit.:

TBD

**TBD** 

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Conf. No.:

TBD

For: Thermally Enhanced Semiconductor Chip Having

**Integrated Bonds Over Active Circuits** 

## INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner For Patents Alexandria, VA 22313-1450

Dear Sir:

MAILING CERTIFICATE UNDER 37 C.F.R. § 1.8(A)

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Assistant Commissioner for Patents, Alexandria, VA 22313-1450

Applicant wishes to bring to the attention of the Patent and Trademark Office the

This information disclosure statement is being mailed before receipt of a first office action on the merits in accordance with 37 C.F.R. 1.56, 1.97, and 1.98.

information noted on the enclosed PTO-1449. Copies of the listed references are enclosed.

No fees are due. However, should the Office decide otherwise, please charge the necessary fee to the deposit account of Texas Instruments Incorporated, Account Number 20-0668.

Respectfully submitted,

Michael K. Skrehot

Attorney for Applicants

Reg. No. 36,682

Texas Instruments Incorporated P. O. Box 655474, MS 3999 Dallas, Texas 75265 (972) 917-5653

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Substitute for Form 1449A/PTO  INFORMATION DISCLOSURE STATEMENT BY APPLICANT  (use as many sheets as necessary)			Complete If Known		
			Application Number.	TBD	
			Filing Date	Herewith	
			First Named Inventor	Taylor R. Efland	
			Group Art Unit	TBD	
			Examiner Name	TBD	
1	of	2	Attorney Docket No.	TI-30963.1	

				U.S. PATENT DOCUM	ENTS	
		U.S. Patent [		Name of Patentee or Applicant of Cited Doc.	Date of Pub. of Cited Doc. (mm-dd-yyyy)	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
Exam. Initials	Cite No. <sup>1</sup>	Number	Kind Code <sup>2</sup> (if known)			
	AA	4,259,685		Romano	03/31/1981	
	AB	4,518,982		DuBois, et al.	05/21/1985	
	AC	5,610,442		Schneider, et al.	03/11/1997	
	AD	5,753,974		Masukawa	05/19/1998	
	AE	6,075,289		Distefano	06/13/2000	
	AF	4,346,396		Carroll, II, et al.	08/24/1982	
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	FOREIGN PATENT DOCUMENTS							
		Foreign Patent Document			Name of Patentee	Date of Pub.		
Exam. Initials*	Cite No.1	Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>2</sup> (if known)	or Applicant of Cited Doc.	of Cited Doc. (mm-dd-yyyy)	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
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<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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					First Named Inventor	Taylor R. Efland		
					Group Art Unit	TBD		
_		(use as mar	ny sheets as necessary)		Examiner Name	TBD		
Sheet		2		2	Attorney Docket No.	TI-30963.1		
	,	, <u></u>	OTHER PR	IOR ART - NON PA	TENT LITERATURE DOCUM	MENTS		
Exam. Initials*	Cite No.1	Include nan			the article (when appropriate), title of the item (book, magazine, journal, serial, e-issue number(s), publisher, city and/or country where published.			
	CA	"Controlled	l Collàpse Reflow Chip Join	ning", L.F. Miller,	IBM J. Res. Develop., Vol. 1	3, May 1969, pp. 239-250		
	СВ	"Geometric Optimization of Controlled Collapse Interconnections", L.S. Goldman, IBM J. Res. Develop., Vol. 13, May 1969, pp. 251-265						
	СС	"Paramedic Study of Temperature Profiles in Chips Joined by Controlled Collapse Techniques", Sevgin Oktay, IBM J. Res. Develop., Vol. 13, May 1969, pp. 272-285						
	CD ·	"Reliability of Controlled Collapse Interconnections", K.C. Norris and A.H. Landzberg, IBM J. Res. Develop., Vol. 13, May 1969, pp. 266-271						
_	CE	"SLT Device Metallurgy and its Monolithic Extension", P.A. Totta and R.P. Sopher, IBM J. Res. Develop., Vol. 13, May 1969, pp. 226-238						
	CF	"Studies of the SLT Chip Terminal Metallurgy", B.S. Berry, and I. Ames, IBM J. Res. Develop., Vol. 13, May 1969, pp. 286-296						
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